United States Department of the Interior
Bureau of Land Management

Arizona Strip Field Office

Environmental Assessment

Gramma Spring Allotment Grazing Permit Renewal

EA-AZ-110-2006-0003

I. INTRODUCTION

This Environmental Assessment (EA) analyzes the proposed grazing permit renewal for the Gramma Spring allotment. The action culminates an evaluation conducted on the allotment under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs). In addition, this EA looks at the current grazing management practices that would maintain desirable conditions and continue to allow improvement of public land resources, or if changes in grazing management for the Gramma Spring allotment are necessary. This EA is intended to evaluate the findings of the Gramma Spring assessment as it relates to vegetation conditions and resource values in the allotment. This is done in an effort to balance demands placed on the resources by various authorized uses within the allotment.

Analysis of existing allotment data indicates that in general or overall conditions are improving. It was determined by the Interdisciplinary Assessment Team (IAT) during the assessment process, that resource conditions on the allotment are meeting Standards for Rangeland Health.

Purpose and Need

The purpose and need of this action is to renew the grazing permit associated with the Gramma Spring Grazing Allotment (#5225). The Gramma Spring Grazing Allotment is located 30 miles south of Fredonia Arizona, in the northern portion of Arizona on lands managed by the Arizona Strip Field Office.

Conformance with Land Use Plan

This proposal is found to be in conformance with the Arizona Strip District Resource Management Plan (RMP) dated January 1992, as amended April 1997. The RMP adopted resource specific activity plans from the Vermillion Grazing EIS (April, 1979), including allotment management plans. The Vermillion Grazing EIS proposed that the Gramma Spring allotment should continue to be managed under the implemented grazing system

This action is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guides Team. The Secretary of the Interior approved the Standards and Guides in April 1997. The Decision Record, signed by the BLM State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona Land Use Plans.

This proposal was initially scoped and found to be consistent with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997. The following decisions from the Arizona Strip RMP apply to the proposal:

> **GZ-20** Establish Utilization levels not to exceed 50 percent average of current years growth on key species.
>
> **RR-11** Restore and/or maintain the generally natural, A remote settings that exist throughout the resource area through mitigation of new projects and implementing restoration projects as necessary.
>
> **VR-03** Activities which would cause adverse long-term impacts to the important visual resources in the following areas would be prohibited or mitigated to the extent practicable; Moccasin Mountain, Gramma and Kanab Creek canyons.
>
> **WS-01** Manage vegetation cover towards ecological stability and sound long-term protective soil cover.
>
> **WS-21** Manage watershed areas according to watershed categorizations to achieve identified objectives.
>
> **TE01** Manage areas consistent with multiple uses to conserve candidate species and their habitats and ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened or endangered. Adverse impacts to listed species will be avoided.
>
> **WL02** Maintain productive wildlife habitat and ensure wildlife needs and considerations are incorporated into land use planning.

Relationships to Statutes, Regulations, or other Plans

Grazing permit renewals are provided for in 43 CFRs 4100 where the objectives of regulations are"....to promote healthy, sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions; to promote the orderly use,....; to establish efficient and effective administration of grazing of public rangelands;....", and as provided for in the Land Use Plans in accordance with multiple-use objectives, requirements and provisions of established laws, regulations and BLM policies incorporating

Desired Plant Community (DPC) objectives using the Ecological Site Index approach.

Grazing management practices on the Gramma Spring Allotment are in conformance with Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. These practices are intended to assist management in meeting the Standards for Rangeland Health.

Renewal of the Gramma Spring grazing permit conforms to the President's National Energy Policy and would not have adverse energy impacts. This action would not deny energy projects, withdraw lands, close roads or in any other way deny or limit access to mineral materials to support energy actions.

The proposed action described and analyzed in this document is in compliance with the Endangered Species Act of 1973 as Amended, section 106 of the National Historic Preservation Act of 1966, the Archaeological Resources Protection Act of 1979, the Federal Land Policy and Management Act of 1976, the National Environmental Policy Act of 1969 and State of Arizona regulations regarding air quality.

Issues raised relating to Standards for Rangeland Health

The issues relating to rangeland health were identified by the Rangeland Resources Team (RRT), Interdisciplinary Assessment Team (IAT), and livestock permittees during the Gramma Spring allotment scoping meeting on January 29, 2002. The normal process of raising and considering issues was followed, but in this particular case, no specific concerns or issues were raised.

Current Planning Process

The Arizona Strip District Office is currently involved in a planning process that would result in 3 stand alone RMPs, one for each new National Monument and one for the Arizona Strip District Office outside of the monuments. No grazing changes are currently anticipated for the Gramma Spring allotment. However, there may be modifications as a result of the new RMPs. The 10-year grazing permit, in part, states "This permit is subject to (A) modification, suspension or cancellation as required by land plans and applicable law; (B) annual review and to modification of terms and conditions as appropriate; …". BLM may use these permit conditions to implement any changes required under the new RMPs.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action (Renewal of 10 Year Grazing Permit)

The Proposed Action is to renew the grazing permit for the Gramma Spring allotment for a period of ten years with current terms and conditions. Renewal of the 10 year grazing permit proposes no change from the present grazing permit. Livestock numbers would be limited to the current active preference. New range improvements to assist in grazing practices and promote rangeland health would be considered through the NEPA process.

The Gramma Spring Allotment consists of the following grazing system: Two pasture seasonal deferred rotation system, with each pasture receiving three months grazing at different times and nine months rest each year.

During the spring and summer months (May thru October) the permitted livestock numbers are removed and taken off each year. This provides additional rest during the growing season. This will help increase plant vigor, density, litter, seed production, and cover.

Grazing Preference and Current Use on the Allotment:

Livestock Numbers	Season of Use	% Federal	Active AUMs
60 Cattle	11/1 to 4/30	100%	360

Voluntary non-use has varied from 4 to 360 AUMs per year, since 1991. Non-use reflects seasonally dry periods, drought years or other factors.

Alternatives Considered But Rejected For Further Analysis

Alternatives are tiered to the Arizona Strip District RMP (January, 1992) and the Vermillion Grazing EIS (April, 1979) which was adopted into the RMP and are basically the same for this action. The Grazing EIS addressed these alternatives: Full Stocking with Management, Stocking Level by Condition Class, No Vegetation Manipulation, Elimination of Grazing on Public Lands, Less Intensive Management of Livestock Grazing and No Action.

The following alternatives were considered for this EA but rejected because they were analyzed in the RMP, to which this document is tiered.

- **Full Stocking with Management alternative** would allow stocking at the estimated livestock carrying capacity of each allotment but otherwise would provide the same management as the proposed action for this allotment, which is intensive management as one of 40 allotments and less intensive management on 10 other allotments.

- **Stocking Level by Condition Class alternative** would set the stocking level based on the average condition and apparent trend of the allotment.

- **No Grazing Alternative (Elimination of Livestock Grazing on Public Lands).** The decision to authorize livestock grazing in this area and specifically on the Gramma Spring allotment is documented in the approved land use plan. The absence of new information or other land use plan decisions showing that continued livestock grazing would preclude BLM from meeting or making significant progress toward achieving land health standards renders the existing land use plan authorizing grazing valid. A no grazing alternative or not renewing a grazing permit would not conform to the land use plan. A plan amendment would be required before closing an allotment to livestock

grazing.

Terms and Conditions of Grazing Permit

Billing for grazing use would be based on the actual use report which is due on or before March 15 each year. Livestock may be moved up to 15 days before or after scheduled move dates

This includes a trailing permit for one day in November, crossing federal lands beginning on BLM lands south of the Kaibab Paiute Indian Reservation and following the Mt. Trumbull Recreation Road to the Gramma Spring Allotment. This also includes a one day return trip in late April or early May along the same route.

Desired Plant Community (DPC)

This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Gramma Spring Allotment S&G Assessment" (2002)[1]. The Gramma Spring Allotment Assessment lists and evaluates achievement of the allotments DPC objectives summarized below. These objectives are expressed in species composition by weight.

Desired Plant Community (DPC) key areas #1 (Limy Upland Inclusion 10-14" pz)

< Maintain ecological condition in Late Seral through 2035 by,
< Maintaining the browse/shrub composition between 40-60% through 2035
< Maintaining the grass composition between 20-40% through 2035
Maintaining the forb composition between 1-10% through 2035

This particular site has a soil inclusion (A mix of different soil types) which favors more shrubs and less grass. The current vegetative composition is adequate for the requirements of this site.

Desired Plant Community (DPC) key areas #2 (Limy Upland 10-14" pz)

< Maintain ecological condition in Late Seral through 2035 by,
< Maintaining the browse/shrub composition between 20-40% through 2035
< Maintaining the grass composition between 40-70% through 2035
Maintaining the forb composition between 1-10% through 2035

Desired Plant Community (DPC) key areas #3 (Limy Upland 10-14" pz)

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[1]Gramma Spring Allotment S&G Assessment, available at the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, Utah 84790.

< Maintain ecological condition in Late Seral through 2035 by,
< Maintaining the browse/shrub composition between 20-40% through 2035
< Maintaining the grass composition between 40-70% through 2035
Maintaining the forb composition between 1-10% through 2035

Monitoring

The goals of monitoring are to determine if the fundamentals or conditions of Rangeland Health are being met within the AMP area under 43 CFR 4180. These conditions of Rangeland Health are:

> (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and land form and maintain or improve water-quality, water quantity, and timing and duration of flow.
>
> (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
>
> (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
>
> (d) Habitats are, or are making significant progress toward being restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

To monitor rangeland health conditions, key areas as defined in the *Monitoring* "Planning for Monitoring", "TR 4400-1", (1984) would be used. The key area would be used as an indicator area to reflect what is happening on the terrain they represent, subsequent of on-the-ground management. Each key area would be established based on a Range Site/Ecological Site (developed by the Natural Resource Conservation Service, (NRCS)) with a specific Potential Natural Community (PNC) and specific physical site characteristics. Knowing the PNC of the area, and using the ecological site descriptions as a guide, DPC objectives can be developed. The DPC then becomes the objectives by which management actions would be measured.

Dry Weight Ranking (DWR) studies would be used to measure attainment of the key area DPC objectives. In addition, Pace Frequency studies would be used at each key area to detect changes of individual species which determines a trend or change in vegetation composition. Pace Frequency and DWR would be completed on each key area every 3-6 years. DWR and Pace Frequency study methodologies are described in *Sampling Vegetation Attributes*, "Interagency Technical Reference 1734-4" (1996).

Livestock use on forage plants would be determined by conducting grazing utilization studies using the Grazed-Class Method as described in the *Utilization Studies and Residual Measurements* "Interagency Technical Reference 1734-3" (1996). Utilization studies would be completed annually by BLM, when livestock are removed from the pasture. Study data would be compiled each year. Other information to be collected and compiled is precipitation, actual use, etc. All monitoring data would be used to evaluate current management and assist BLM in making management decisions that helps achieve vegetation objectives on the allotment.

Based on analyses of the allotment's monitoring data and supporting documentation contained in the Gramma Spring S&G Assessment Report (2002), resource conditions on the allotment meet all applicable standards for rangeland health.

III. AFFECTED ENVIRONMENT

The following critical elements of the human environment are not affected by the proposed action or alternatives or are not present on this allotment:

- Air Quality
- ACECs
- Native American Religious Concerns
- Wastes (hazardous or solid)
- Water (quality and quantity of surface/underground supplies)
- Prime or unique farmlands
- Floodplains
- Environmental Justice
- Wetlands/Riparian Areas
- Wild & Scenic Rivers
- Wilderness
- Wild Horses and Burros
- Minerals

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected Environment pages III-1 to III-58, and pages 41 to 92 of the Vermillion Grazing EIS (April, 1979) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Vermillion Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Climate, Vegetation, Water Sources, Threatened and Endangered Species, Wildlife, BLM Sensitive and State Species of Concern, Soils, Lithology, Cultural/Historical, Visual Resources, Livestock Grazing, Recreation Resources, and Socioeconomics.

This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Gramma Spring Allotment S&G Assessment"

(2002)[2]. The Gramma Spring Allotment S&G Assessment describes the resources and issues applicable to the allotment area.

The Arizona Strip Field Office is located in the northwest portion of Arizona. The topography of the allotment area is semiarid range with sloping, rolling, or flat terrain to steep canyon walls. Elevation ranges from 4800 to 5800 feet, temperatures average 30 degrees in the winter and 80+ degrees in the summer, and precipitation averages 10-14 inches annually. A general description of the affected environment may be found in the FEIS. Site specific components which could be affected by the proposal are as follows:

Climate

The Gramma Springs Allotment is most represented by the Sunset rain gauge which is 10.02" precipitation per year and approximately 16% (1.65")comes in the fall, 24% (2.37") comes in the winter, 23% (2.33") comes in the spring and 37% (3.70")comes in the summer.

Vegetation

There are three principal vegetative types[3] within the allotment: Grassland, sagebrush, and pinyon-juniper.

- The grassland type consists of plant species such as blue grama, galleta grass, squirreltail needle 'n' thread, red three-awn and Indian ricegrass.
- The sagebrush type includes big sagebrush, squirrel tail, blue grama, sand dropseed, mormon tea, yellow rabbitbrush, winterfat and fourwing saltbush.
- The pinyon-juniper type includes pinyon, juniper, sagebrush, fourwing saltbush, desert holly, blue grama, and squirrel tail.

These vegetative types make up the different ecological sites[4] that are part of the Major Land Resource Units, as defined by the NRCS. The dominant ecological sites on the Gramma Spring allotment are: Limy Upland.

Water Sources

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[2] Gramma Spring Allotment S&G Assessment, available at the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, Utah 84790.

[3] Vermillion Grazing Environmental Impact Statement

[4] An ecological site is a distinctive kind of land that differs from other kinds in its ability to produce a characteristic plant community. Each ecological site is a product of all environmental factors responsible for its development. Each site is capable of producing and supporting a plant community typified by an association of species that differs from other ecological sites in species kind, proportion and total production.

The Gramma Spring allotment contains:

1 spring piped to a large drinker trough.

During wet periods, many rock pockets hold water up to a few weeks.

The Gramma Spring water source is available to wildlife yearlong and cattle seasonally. All of the water rights to the spring are held by the permittee. It is a requirement of the agreements to make the water accessible to wildlife, for the time that water is available. There is no competition for water between wildlife and cattle at the water sources.

A wildlife catchment on the rim above this allotment has water available yearlong.

Threatened or Endangered (T&E) Species*[5]

The Gramma Spring Allotment includes canyon areas identified by the 1997 Spotsky-Willey model as having some of the characteristics of habitat of Mexican spotted owl (*Strix occidentalis* lucida), a threatened species. A total of 258 acres in 15 polygons located along the northeast-facing canyon walls were predicted to have at least some potential to provide nesting and roosting habitat for spotted owls. Four surveys have been done in accordance with established protocols since 1991. No spotted owls have been detected in the area. In addition, the habitat lacks riparian growth and the cool, shaded nature of more typical owl habitats found in Zion and Paria Canyons to the north. BLM biologists consider the site too hot and dry to provide suitable habitat for Mexican spotted owls.

The Gramma Spring Allotment does not include any riparian habitat for the endangered southwestern willow flycatcher (*Empidonax traillii extimus).* However, BLM biologists have identified suitable, but unoccupied habitat for the species on two allotments within five miles of the Gramma Spring Allotment. Suitable WIFL habitat occurs on the Wildcat and Kanab Creek Allotments for approximately one half mile along Kanab Creek in the vicinity of Clearwater Springs. This patch of suitable habitat is over ten miles upstream from the point where Gramma Canyon empties into Kanab Creek. The habitat patch at Clearwater Springs is over eight miles from the closest point in the Gramma Spring Allotment. At least six surveys for willow flycatchers have been done in this area since 1995 in accordance with established protocols. No willow flycatchers were detected during any of these surveys.

Bald eagle (*Haliaeetus leucocephalus*), California condor (*Gymnogyps californianus*), and peregrine falcon (*Falco peregrius alatum*) may occasionally fly over the Gramma Spring Allotment. There are no riparian areas that would provide foraging habitat for peregrine falcon, bald eagle, Mexican spotted owl, or southwestern willow flycatcher. An experimental non-essential population (as defined under section 10J of the Endangered Species Act) of California

[5] An inadvertent oversight to the S & G Assessment Report omitted two species, Mexican spotted owl and Southwest willow flycatcher. An addendum was written for this report and attached to it. This does not change the outcome of this assessment.

condors was established on the Vermillion Cliffs in 1996. These birds may eventually forage on carrion within the allotment but have not yet been observed doing so. No other federally listed T&E (plant or animal) species are known to occur in the area covered by this EA.

Wildlife

Desert Bighorn Sheep: The Paria - Kanab Creek HMP rated the Gramma Canyon area as having good to excellent potential for supporting reintroduction of bighorn sheep. No estimates were provided of the number of bighorn sheep the area could support. AGFD recommended a unit-wide herd management goal of 400 bighorn.

Following release of 53 desert bighorn through 1981, and in later years supplemental releases were done, AGFD conducted periodic aerial surveys throughout the habitat. AGFD estimated the Hacks Canyon population at 75 bighorn in 2001.

The literature indicates that bighorn sheep require approximately equal components of grass, forbs, and shrubs. The rugged and steep nature of their habitat limits contact between sheep and cattle to a few areas at the elevational extremes of the allotments. The majority of habitat on this allotment used by desert bighorn sheep is essentially ungrazed due to its inaccessibility to livestock.

Other Nongame Species: As with most allotments, nongame wildlife forage and cover needs have not been specifically addressed in applicable management plans, including those pertaining to wildlife habitat (HMPs). No monitoring programs have been established that would identify trends in nongame wildlife populations. It is typically assumed that management actions that provide for healthy rangelands will benefit most nongame species. This is particularly true where there is a mosaic of habitat types separated by edge or transitional communities.

BLM Sensitive or State Species of Concern

Ferruginous hawks (*Buteo regalis*) are known to forage over grassland habitat similar to that found on the allotment, though specific sightings have not been recorded for the area. Western burrowing owls (*Athene cunicularia hypugea*) are sensitive species that may occur within or adjacent to this area, but have not been recorded on the Gramma Spring Allotment. A variety of sensitive bat species have been known to occur in the surrounding area, including Townsend's big-eared (*Corynorhinus townsendii*), spotted bats (*Euderma maculatum*), small-footed myotis (*Myotis ciliolabrum*), fringed myotis (*Myotis thysanodes*), and big free-tailed bats (*Nyctinomops macrotis*).

One BLM sensitive plant occurs in this allotment, Grand Canyon Rose (*Rosa stellata Wooton var abyss A. Phillips)*. It occurs on or near the Kanab Canyon rim at two general locations. They are in section 8 and section 29/30 in T38N R3W. The entire population occupies about 1 acre. The population had been monitored in a plot for ten years(1987-1997). All changes in population in that time were in response to the amount of rainfall. Ramets increased with the wet years and

ramets died back to the ground during dry years. Since 1997, checks on the population show a drop during the 1999-2004 drought, but with the past as a gauge, if wet weather stays with us, the ramets of the clonal areas will increase. This rosa is boldly spiny and not palatable to livestock. It has never been observed trampled nor grazed and occur on the rim in rocky areas out of reach where livestock do not graze.

No sensitive reptiles or amphibians are known or suspected to occur on this allotment.

Soils

SCS Soil Survey of Mohave County Area 625(SCS, 1991) Arizona, East of Hurricane Cliffs, 1992

Soil Ecological Sites – 625

1	SCS Soil Survey of Mohave County Area 625, Arizona, East of Hurricane Cliffs, 1992.
15	Gypsiorthids-Gypsiorthids, shallow complex, 1 to 50 percent slopes, (fan terraces, hills), gypsiferous shales; Gypsiorthids=Gypsum Upland, 7" to 11" ppt; Gypsiorthids shallow=Gypsum Hills, 7" to 11" ppt
17	Havasupai-Mellenthin complex, 2 to 12 percent slopes, (fan terraces, hills), limestone; Shallow Loamy, 10" to 14" ppt
30	Mellenthin-Anasazi complex, 1 to 15 percent slopes, (hills), limestone; Mellenthin= Shallow Loamy, 10" to 14" ppt; Anasazi=Loamy Upland, 10" to 14" ppt
33	Mellenthin very gravelly loam, 1 to 25 percent slopes, (hills), limestone; Shallow Loamy, 10" to 14" ppt
65	Torriorthents-RO complex, warm, 30 to 70 percent slopes, (hills, scarps), Moenkopi colluvium; Breaks, 8" to 12" ppt

Lithology:

The allotment consists of the steep walls of Gramma Canyon and its gravelly floodplain. Kaibab limestone is the top formation followed by Toroweap and Coconino sandstones down to Hermit shales.

Cultural/Historical

Cultural resources cover the span of human occupation in the new world from around 10,000 years ago, up to and including the ranch operators of today. Our specific knowledge of the cultural makeup is limited due to the lack of scientific investigation of the area. A class I review was conducted and certain sites have been recorded on the allotment, but no known impacts to significant resources resulting from grazing have been found or documented.

Visual Resources

Visual Resource Management (VRM): The area within this allotment has been classified as a Class 2 VRM area.

Livestock Grazing

The Gramma Spring Allotment (#5225) is comprised of 4,495 acres of federal land. The total number of active AUMs on the allotment is 360.

Recreation Resources

This allotment is considered to have recreation values for its geology, scenic view sheds, and remoteness. General recreation activities include: sight seeing, horseback riding, hiking, camping, hunting, rock collecting, photography, bird watching and nature study.

Off Highway Vehicles: This allotment has two classifications for OHV use: Closed and Limited to Designated Roads and Trails.

Recreation Opportunity Spectrum: The area within this allotment was classified as A Semi-Primitive Non-Motorized.

Special Management Areas: None.

Socio/Economic

The economic base of the Arizona Strip is mainly ranching with a few gypsum/selenite mines and uranium operations. Nearby communities are supported by tourism (including outdoor recreation), construction and light industry. The social aspect involves remote, unpopulated settings with moderate to high opportunities for solitude.

IV. ENVIRONMENTAL IMPACTS

Only impacts that may result from implementing the proposed action or alternatives are described in this EA. If an ecological component is not discussed, it is because BLM resource specialists have considered effects to the component and found the proposed action or alternatives would have minimal or no effects.

General effects from projects similar to the proposed action or alternatives are also described in the documents to which this EA is tiered.

This EA incorporates by reference the Gramma Spring Allotment S&G Assessment and Appendix (2002) that provides a complete discussion, analysis and summaries of the range

resources and associated data and issues.

Climate

The Proposed Action would have no effect on the climate. However, the Proposed Action would allow affected resources to respond to the climate with improvement to these resources, as mentioned below in the drought and vegetation sections.

Drought

In response to drought conditions, BLM can modify the terms and conditions of a grazing permit (i.e. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

Vegetation

Grazing impacts on vegetation are mitigated by timing of use, adjusting of stocking rates, and conformance with Standards and Guidelines for Grazing Management. Under current management the grazing system is designed to allow for different seasons of use and rest, allowing cool and warm season grasses and browse to elongate the plants apical bud, build vigor and achieve seed ripe.

Pace Frequency trend data on the Gramma Spring allotment, vegetation components indicate that two key areas are in upward trend and one is in downward trend(this is a result of lack of precipitation in a mix of soils that do not represent what is actually there compared with the Limy Upland range site guide). These vegetation components constitute the ecological sites upon which DPC objectives are based(all three are in late seral and upward). Key areas are established on ecological sites and studied to determine the ecological status[6] of that site and the

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[6]Ecological status is the present state of vegetation of an ecological site in relation to the potential plant community for that site. It expresses the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the potential natural plant community for the site. Ecological status is a coefficient of community similarity, which gives an ecological rating of the plant community. Ecological status is also defined in seral stages, which are the developmental stages of ecological succession. The four ecological status classes correspond to percent similarity to potential natural community and correlate with seral stage ratings.

Early Seral Stage (0-25%)
Mid Seral Stage (26-50%

trend of plant species on the site.

Table 1 lists pastures and key areas, the ecological site of the key areas, current ecological status and associated similarity indexes.

Table 1

Allotment (Pasture)	Key Area	Ecological Site	Ecological Status	Similarity Index
Gramma Spring (Middle)	#1	Limy Upland Inclusions 10-14" pz	Late Seral	53%
Gramma Spring (North)	#2	Limy Upland 10-14" pz	Late Seral	58%
Gramma Spring (South)	#3	Limy Upland 10-14" pz	Late Seral	63%

Utilization levels during the analysis period have averaged below the 50% management goal. During the evaluation period, average utilization across all pastures for Cool Season grasses was 30%, ranging between 5% and 48%. For the Warm Season grasses the average was 28%, ranging from 5% to 45%. Browse averaged 32% and all browse species ranged from 5% to 54%.

Current grazing is operated under a two pasture seasonal deferred rotation system, with each pasture receiving three months grazing at different times and nine months rest each year. The permitted livestock numbers are removed and taken off each year between May and October. This provides additional rest during the growing season.

Threatened or Endangered Species(T&E)

After examining the canyons identified as having some of the characteristics of Mexican spotted owl habitat, BLM biologists determined that the area has little or no potential to support Mexican spotted owls. The canyon habitat is considered too hot and dry, with no suitable foraging areas for these owls. Four surveys for spotted owls have been conducted in this area since 1991 in accordance with accepted protocols. No spotted owls were detected. The proposed action would have no affect on Mexican spotted owls or their habitat.

The northwestern portion of the Gramma Spring Allotment is approximately 8.5 miles from suitable, unoccupied southwestern willow flycatcher habitat. Despite the fact that this is greater

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Late Seral Stage (51-75%)
Potential Natural Community (76-100%)

than the 5 mile zone of consideration typically used for southwestern willow flycatcher, an assessment of upland conditions on the allotment and presence of range improvement projects was conducted. As indicated in the Gramma Spring Allotment Assessment report, Standard 1 is being met on the allotment. Therefore, soil and watershed conditions in the upland areas are consistent with site potential. Even if conditions deteriorated on this allotment, there would be no affect on willow flycatcher habitat more than eight miles upstream. In addition, there are no corrals, feedlots, or troughs where significant numbers of brown-headed cowbirds, a nest parasite of willow flycatchers, would gather. The proposed action would have no affect on southwestern willow flycatcher or their habitat. Future range improvement projects would have to be evaluated for their potential to attract cowbirds.

Implementation of the proposed action would have no affect on an occasional fly over by bald eagle, California condor, or peregrine falcon. The proposed action would have no affect on any other listed, proposed, or candidate species.

BLM Sensitive or State Species of Concern.

The Proposed Action would have no affect on BLM sensitive and state species of concern. These species include the avian species, Ferruginous hawk, western burrowing owl and sensitive bat species such as Townsend's big eared, spotted bats, western small-footed myotis, fringed myotis, big free-tailed bats and the grand canyon rose.

Wildlife

The Proposed Action would have no substantial impacts on any objectives for meeting wildlife habitat needs that are provided for in habitat management plans (HMPs) written for specific geographic regions. The Kanab Creek Habitat Management Plan provides management direction for this area. This plan primarily addresses the needs of threatened, endangered, or sensitive species and big game animals.

The Proposed Action would have no substantial impacts on big game(mule deer, bighorn sheep) or the other nongame wildlife found on the allotment. Observations and studies over time have indicated that this area receives only light use by mule deer, primarily as transitional habitat between summer and winter range.

The Proposed Action would have no substantial impacts on Pronghorn Antelope. Observations and studies over time have indicated that this area receives light use by pronghorn, which may occupy or transition back and forth between areas. According to recent fence inventory by the Arizona Game and Fish Department, this area within the allotment does meet the standards for antelope passable fences. Any maintenance or replacement fences will be built in compliance. But none are proposed at this time.

Wildlife catchments and other waters nearby are used frequently by Mule deer and Bighorn sheep.

Migratory Birds

Executive Order 13186 requires BLM and other federal agencies to work with the U.S. Fish and Wildlife Service to improve protection for migratory birds. Implementation of the proposed action is not likely to adversely affect any species of migratory bird known or suspected to occur on the allotment. No take of any such species is anticipated**.**

Soils

Attributes making up the soil resource should remain stable or improve thru implementation of the Proposed Action Alternative and enforcement of the Arizona Standards and Guides process for permitted livestock grazing within the Gramma Spring Allotment. The current grazing rotation allows for seasonal plant rest and vigor. Utilization levels are within that allowable and complete spring and summer rest from grazing during the growing season each year.

Soil in the Gramma Spring includes primarily Limy Upland, Breaks and Shallow Loamy range sites, with some mix of soil inclusions. However, there are also hills and fan terraces ranging from one to twenty percent slopes.

Cultural Resources

There would be no substantial impact to cultural or historical sites as a result of renewing this grazing permit. Cultural resources project file AZ BLM 110-2006-028 contains documentation of compliance with Section 106 of the National Historic Preservation Act. Great efforts are made to avoid any sites during allotment project implementation. Further, archaeological clearances are completed prior to any and all project approvals.

Livestock Grazing

Under the Proposed Action livestock grazing would continue and the permittee would be allowed to continue in the livestock business.

Recreation Resources

Recreation in the area is primarily composed of sightseeing, horseback riding, hiking, camping, hunting, rock collecting, photography, bird watching and nature study. No impact to recreation is expected.

Cumulative Impacts

Cumulative Impacts are tiered to the Arizona Strip RMP (1992), Environmental Consequences pages IV-36 to IV-38, and to chapter 4 of the Vermillion Grazing EIS (1979) which was adopted into the RMP. Unavoidable Adverse Impacts, Relationship between Local Short-term Uses of

Man's Environment, Maintenance and Enhancement of Long-term Productivity, and the Irreversible and Irretrievable Commitments of Resources were discussed.

Cumulative impacts occur when additional management facilities are added to those already present. Grazing plans are intended to meet specific objectives to the plan area and involve rangeland improvements that are designed to maintain or improve wildlife habitat, watershed, and overall resource conditions, thus improving ecosystem health.

Residual Impacts

Residual Impacts are tiered to the Arizona Strip RMP (1992), Irreversible and Irretrievable Commitments of Resources page 172 of the Vermillion Grazing EIS (1979) which was adopted into the RMP. Though the proposed action doesn't propose any new fences, it does allow for the existence of present fence lines, which do create some restrictions of free passage, but do not prevent passage of mule deer or bighorn sheep. Existing fences are pronghorn compliant. Other wildlife using the area are not restricted by existing fences.

Monitoring

The monitoring described in the proposed action (page 6-7) is sufficient to identify changes in vegetation as a result of livestock grazing activities. In addition to those methods described, there are efforts in place to inventory for noxious weed establishment, as well as monitor treated areas for treatment effectiveness. BLM Arizona Strip Field Office noxious weed specialist has the lead on monitoring and treating noxious weeds for this area.

Mitigation

When noxious weeds are located, various methods are used for their control depending on the size of the infestation and growth stage of the plants. The methods include but are not limited to:

Physical or mechanical
Biological
Chemical

If vegetative monitoring indicates current livestock grazing practices are causing non-attainment of resource objectives, BLM can modify the terms and conditions of a grazing permit (ie. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

V. CONSULTATION AND COORDINATION

This EA was prepared by the Bureau of Land Management (BLM), Arizona Strip Field Office,

345 E. Riverside Drive, St. George, UT 84790. Public involvement for the Gramma Spring S&G evaluation began January 29, 2002. The assessment was conducted by an interdisciplinary assessment team (IAT) of resource specialists from the BLM. The IAT was assisted by the Rangeland Resources Team (RRT) appointed by the Arizona Resource Advisory Council. A draft evaluation was sent out for public review and comment to Individuals, Groups and Agencies. Comments from Individuals, Groups and Agencies were incorporated in to the Final Gramma Spring S&G evaluation report.

Interdisciplinary Assessment Team (IAT):
Linda Price.....Project Coordinator
Kevin Schoppmann....Range/Grazing
John Herron.....Archaeologist
Robert Smith....Soils, Watershed
Larry Gearhart.....Wilderness/Recreation
Michael Herder.....Wildlife Biologist

Internal Reviewers:
Gloria Benson, Native American Coordinator
Tom Folks, Recreation
Laurie Ford, Lands/Realty/Minerals/Team Leader
Michael Herder, Wildlife Team Lead
John Herron, Cultural
Lee Hughes, Plants/Ecology
Ron Wadsworth, Supervisory Law Enforcement
Linda Price, S&G Program Coordinator
Bob Sandberg, Range Team Lead
Richard Spotts, Environmental Coordinator
Ray Klein, GCPNM Supervisory Law Enforcement
Larry Gearhart, Recreation/Visual/Wilderness

Reviewed by Planning and Environmental Coordinator(P&EC):

_____ _____

Richard Spotts **Date**
P&EC

FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

Implementation of the Arizona Standards for Rangeland Health and Guidelines
for Grazing Management for the Gramma Spring Grazing Allotment Permit Renewal

RE: AZ-EA-110-2006-0003

The Environmental Assessment AZ-110-2006-0003, hereby incorporated by reference, analyzed a livestock grazing permit renewal action conducted under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs) where an intensive allotment evaluation was conducted with public and other agency involvement throughout the process. Analysis of existing study data indicates that overall ecological conditions are improving on the allotment. The resource conditions on the allotment are meeting Standards for Rangeland Health. Issues were analyzed and it was determined that current management is not a factor in preventing attainment of Standards.

The Environmental Assessment reaffirmed the present management system, and determined that the present grazing management program will continue to allow improvement to the health of public land resources, such as soil, water, vegetation, wildlife habitat, and wildlife and other resource values.

Based on the analysis of Environmental Assessment AZ-110-2006-0003, I have determined that the renewal of the Gramma Spring Allotment Grazing Permit with current terms and conditions will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared.

Field Manager
Arizona Strip Field Office

Date